

We Claim:

1. A method for programming an optical reader with use of a host processor, the method comprising:
generating a plurality of parameters using said host processor in response to a user initiated command,
each of the plurality of parameters for use in determining whether an optical reader will automatically attempt to
decode a certain bar code type;

optically encoding data corresponding to each parameter to thereby create at least one bar code symbol,
the at least one bar code symbol encoding information corresponding to each of said parameters;

outputting said at least one bar symbol into such form that a said optical reader can read said at least
one bar code symbol; and

reading the at least one bar code symbol utilizing said optical reader to thereby download the
corresponding parameters from the computer to said optical reader, whereby said optical reader is programmed
in accordance with the downloaded parameters.

2. The method of claim 1, wherein said optical reader includes a slice image data acquisition system.

3. The method of claim 1, wherein said optical reader comprises a two-dimensional solid state image
sensor.

4. The method of claim 1, wherein the step of generating includes the step of reading utilizing said
host processor parameters from an optical reader other than an optical reader being reprogrammed.

5. The method of claim 1, where said outputting step includes one of printing or displaying said at
least one bar code symbol.

6. A method for reprogramming an optical reader, the optical reader including a parameter table
configured to define the reader operating modes, the method comprising:

optically encoding each of the plurality of optical reader commands, each optical reader command
having a corresponding optical symbol;

displaying at least one of the optical symbols on a display; and

reading the displayed at least one optical symbol with the optical reader, the optical reader being
reprogrammed in accordance with the optical reader command encoded by the displayed at least one optical
symbol.

7. The method of claim 6, wherein the optical reader command is configured to modify the parameter
table.

8. The method of claim 6, wherein the optical reader command is a vector processing command.
9. A method for controlling an optical reader, the optical reader including at least one of an operating program and a parameter table configured to define optical reader functionality, the method comprising:
 - coupling the optical reader to a computer via an interface, the computer including a plurality of computer programs, each of the plurality of computer programs being configured to control the at least one optical reader;
 - receiving an optical reader identifier from the optical reader;
 - comparing the optical reader identifier with the plurality of computer programs to determine reader compatibility;
 - selecting a compatible computer program; and
 - executing the selected compatible computer program to thereby modify the at least one operating program or the parameter table, whereby optical reader functionality is modified.
10. The method of claim 9, wherein said coupling step includes the step of coupling a nonintegrated computer to said reader
11. The method of claim 9, further comprising the step of reading the optical reader operating program.
12. The method of claim 9, further comprising the step of reading the optical reader parameter table.
13. The method of claim 9, further comprising the step of downloading a new operating program from the computer to the optical reader.
14. The method of claim 9, further comprising the step of modifying the optical reader parameter table.
15. The method of claim 9, further comprising the step of displaying the optical reader parameter table.
16. The method of claim 9, further comprising the step of printing the optical reader parameter table.
17. In a computer including a user interface, the user interface including a display and a selection mechanism, a method for programming a plurality of optical readers, the method comprising:
 - generating a plurality of parameter tables, each of the plurality of parameter tables determining an operating mode of an optical reader;

optically encoding data corresponding to each parameter table to thereby create a plurality of optical symbols, each optical symbol corresponding to one parameter table;
displaying the plurality of optical symbols; and
reading each of the plurality of optical readers in succession, each optical reader reading a selected optical symbol to thereby download the corresponding parameter table from the computer to the optical reader, whereby each optical reader is programmed in accordance with the downloaded parameter table.

18. The method of claim 17, wherein the optical reader includes a 1D image sensor

19. The method of claim 17, wherein the optical reader includes a 2D image sensor.

20. The method of claim 17, wherein the step of generating includes editing an existing parameter table.

21. The method of claim 20, further comprising the step of downloading the existing parameter table from the optical reader.